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# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/661,164 Filing Date: September 13, 2000 Appellant(s): KIKINIS ET AL.

Chunhsi Andy Mu For Appellant

**EXAMINER'S ANSWER** 

This is in response to the appeal brief filed May 26, 2009 appealing from the Office action mailed December 2, 2008.

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#### (1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

#### (2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

## (3) Status of Claims

The statement of the status of claims contained in the brief is correct.

## (4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

## (5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

## (6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

#### (7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

## (8) Evidence Relied Upon

US 2001/0037500 A1	Reynolds et al.	11-2001
US 2001/0014975 A1	Gordon et al.	08-2001
6.698.020	Zigmond et al.	2-2004

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US 2002/0056129 A1 Blackketter et al. 5-2002

5,070,404 Bullock et al. 12-1991

6,351,474 Robinett et al. 2-2002

US 2003/0131356 A1 Proehl et al. 7-2003

## (9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-6, 9-16, 18, 26-31, 33, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reynolds et al. (US20010037500A1) in view of Gordon et al. (US20010014975A1) and Zigmond et al. (US006698020B1).

Regarding claim 1, Reynolds et al. (Reynolds) discloses a receiver (See Fig. 1, 100) comprising:

receive a broadcast stream (See Fig. 1, 110; paragraph 0025), a portion of the broadcast stream (See paragraph 0026; meta data component 114) having a first priority indicator (See paragraphs 0034-0036; wherein these triggers are found in the meta data component 114);

receive media separate from the broadcast stream (See Figs. 1 and 2, 142), the media having a second priority indicator (See paragraph 0037; the assigned priority value of the local meta data 142) greater than the first priority indicator (See paragraph 0037; the priority value of the local meta data is higher than the first priority indicator/value);

determine whether the first priority indicator is greater than the second priority indicator (See paragraphs 0033-0037; priority level); and

replace the portion of the broadcast stream with the separate media in response to determining that the first priority indicator is lower than the second priority indicator (See paragraphs 0033-0037; if the first priority indicator/level is lower than the second priority indicator/level then insertion is allowed for that trigger).

However, Reynolds does not explicitly disclose receiving a signal configured to modify the first priority indicator from a first priority to a second priority, modifying the first priority indicator from the first priority to the second priority in response to receiving the signal, that the receiver is in a set top box, and memory storing computer readable instructions that, when executed, cause the set top box to perform the above functions.

Gordon et al. (Gordon) discloses a television distribution system. Gordon discloses receiving a signal (e.g. control signal) configured to modify the first priority indicator (e.g. priorities of the viewable data objects) from a first priority to a second priority and modifying the first priority indicator from the first priority to the second priority in response to receiving the signal (See paragraph 0029; dynamical priorities change in response to a control signal). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system disclosed by Reynolds to receive a signal configured to modify the first priority indicator from a first priority to a second priority and modify the first priority indicator from the first priority to the second priority in response to receiving the signal, as taught by Gordon, in order to allow system to dynamically adjust how to distribute programs based on viewing trends and events (See paragraph 0007 and 0029).

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Furthermore, Reynolds system would still compare the modified first priority indicator to the second priority indicator in order to determine whether substitution will still take place (See Reynolds paragraph 0037).

Zigmond et al. (Zigmond) discloses a similar insertion/triggering system. Zigmond discloses that the receiver is in a set top box (See Fig. 3; col. 7 lines 42-49, WebTV Box). Furthermore, Zigmond discloses memory storing computer readable instructions that, when executed, cause the set top box to perform certain functions (See col. 4 lines 48-67). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the receiver disclosed by Reynolds to be in a set top box and have memory storing computer readable instructions that, when executed, cause the set top box to perform the above functions, as taught by Zigmond, in order to allow the receiver to take on an easy form factor thereby allowing the receiver to easily be placed within a household (See col. 7 lines 37-49).

Regarding claim 2, wherein the first and second priority indicators comprise at least one of a number, a letter, and a symbol (See Reynolds paragraph 0034-0037).

Regarding claim 3, wherein the separate media and the broadcast stream are the same media (See Reynolds Fig. 1; they are both electrical signals, digital data, etc...).

Regarding claim 4, wherein the separate media and the broadcast stream are different media (See Reynolds paragraphs 0025-0026; Channel TV data vs. TV program).

Regarding claim 5, wherein an event triggers an insertion of the separate media into the broadcast stream (See Reynolds paragraph 0032-0037; the triggers cause the insertion).

Regarding claim 6, Reynolds in view of Gordon and Zigmond does not explicitly disclose that the event includes an arrival of an e-mail.

Official Notice is taken that it is well known in the art to notify the user of an arrival of an e-mail. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system disclosed by Reynolds in view of Gordon and Zigmond to notify the user of an arrival of an e-mail in order to increase the capabilities of the system thereby providing a means of notifying the user of various content (Support for the Official Notice is found in Proehl et al. (US20030131356A1) paragraph 0038).

Regarding claim 9, wherein the first and second priority indicators are user specified (See Reynolds Fig. 1; paragraph 0037; the local affiliate operator who sets the priorities of the system is the "user").

Regarding claim 10, wherein the set-top box is part of a television system (See Reynolds Fig. 1 and Zigmond Fig. 3) or radio system.

Regarding claim 11, Reynolds discloses a method of inserting media into a broadcast stream (See Fig. 1), the method comprising:

receiving, at a receiver, a broadcast stream (See Fig. 1, 110; paragraph 0025) having a first priority indicator, wherein the first priority indicator is associated with a portion of the first broadcast stream (See paragraph 0026; meta data component 114)

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(See paragraphs 0034-0036; wherein these triggers are found in the meta data component 114);

receiving, at the receiver, media separate from the broadcast stream (See Figs. 1 and 2, 142) and having a second priority indicator (See paragraph 0037; the assigned priority value of the local meta data 142) lower than the first priority indicator (See paragraph 0037; the priority value of the local meta data is lower than the first priority indicator/value);

determining, at the receiver, whether the modified first priority indicator is greater than the second priority indicator (See paragraphs 0033-0037; priority level); and

in response to determining that the modified first priority indicator is lower than the second priority indicator, inserting the separate media into the broadcast stream (See paragraphs 0033-0037; if the first priority indicator/level is lower than the second priority indicator/level then insertion is allowed for that trigger).

However, Reynolds does not explicitly disclose receiving a signal configured to modify the first priority indicator from a first priority to a second priority, modifying the first priority indicator from the first priority to the second priority in response to receiving the signal and that the receiver is in a set top box.

Gordon et al. (Gordon) discloses a television distribution system. Gordon discloses receiving a signal (e.g. control signal) configured to modify the first priority indicator (e.g. priorities of the viewable data objects) from a first priority to a second priority and modifying the first priority indicator from the first priority to the second priority in response to receiving the signal (See paragraph 0029; dynamical priorities

change in response to a control signal). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system disclosed by Reynolds to receive a signal configured to modify the first priority indicator from a first priority to a second priority and modify the first priority indicator from the first priority to the second priority in response to receiving the signal, as taught by Gordon, in order to allow system to dynamically adjust how to distribute programs based on viewing trends and events (See paragraph 0007 and 0029).

Furthermore, Reynolds system would still compare the modified first priority indicator to the second priority indicator in order to determine whether substitution will still take place (See Reynolds paragraph 0037).

Zigmond et al. (Zigmond) discloses a similar insertion/triggering system. Zigmond discloses that the receiver is in a set top box (See Fig. 3; col. 7 lines 42-49, WebTV Box). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the receiver disclosed by Reynolds to be in a set top box, as taught by Zigmond, in order to allow the receiver to take on an easy form factor thereby allowing the receiver to easily be placed within a household (See col. 7 lines 37-49).

Claim 12 contains the limitations of claims 2 and 11 and is analyzed as previously discussed with respect to those claims.

Claim 13 contains the limitations of claims 3 and 11 and is analyzed as previously discussed with respect to those claims.

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Claim 14 contains the limitations of claims 4 and 11 and is analyzed as previously discussed with respect to those claims.

Claim 15 contains the limitations of claims 5 and 11 and is analyzed as previously discussed with respect to those claims.

Claim 16 contains the limitations of claims 6 and 15 and is analyzed as previously discussed with respect to those claims.

Regarding claim 18, Reynolds further discloses wherein a plurality of priority indicators are each associated with a different portion of the first broadcast stream based on a geographic area (See Reynolds paragraphs 0028 and 0038).

Regarding claim 26, Reynolds et al. (Reynolds) discloses a method comprising: receiving a broadcast stream (See Fig. 1, 110; paragraph 0025) having a first priority indicator (See paragraphs 0034-0036; wherein these triggers are found in the meta data component 114), wherein the first priority indicator is associated with a portion of the broadcast stream (See paragraph 0026; meta data component 114);

receiving a separate media (See Figs. 1 and 2, 142) having a second priority indicator (See paragraph 0037; the assigned priority value of the local meta data 142) lower than the first priority indicator (See paragraph 0037; the priority value of the local meta data is lower than the first priority indicator/value);

determining whether the first priority indicator is greater than the second priority indicator (See paragraphs 0033-0037; priority level); and

in response to determining that the first priority indicator is lower than the second priority indicator, inserting the separate media into the broadcast stream (See

paragraphs 0033-0037; if the first priority indicator/level is lower than the second priority indicator/level then insertion is allowed for that trigger).

However, Reynolds does not explicitly disclose receiving a signal configured to modify the first priority indicator from a first priority to a second priority and modifying the first priority indicator from the first priority to the second priority in response to receiving the signal and a tangible machine-readable storage medium embodying instructions executable by a set top box to perform the method above.

Gordon et al. (Gordon) discloses a television distribution system. Gordon discloses receiving a signal (e.g. control signal) configured to modify the first priority indicator (e.g. priorities of the viewable data objects) from a first priority to a second priority and modifying the first priority indicator from the first priority to the second priority in response to receiving the signal (See paragraph 0029; dynamical priorities change in response to a control signal). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system disclosed by Reynolds to receive a signal configured to modify the first priority indicator from a first priority to a second priority and modify the first priority indicator from the first priority to the second priority in response to receiving the signal, as taught by Gordon, in order to allow system to dynamically adjust how to distribute programs based on viewing trends and events (See paragraph 0007 and 0029).

Furthermore, Reynolds system would still compare the modified first priority indicator to the second priority indicator in order to determine whether substitution will still take place (See Reynolds paragraph 0037).

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Zigmond et al. (Zigmond) discloses a similar insertion/triggering system. Zigmond discloses that the receiver is in a set top box and has a tangible machine-readable storage medium embodying instructions executable by a set top box to perform a method (See Fig. 3; col. 7 lines 42-49, WebTV Box; col. 4 lines 48-67). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the receiver disclosed by Reynolds to be in a set top box and have a tangible machine-readable storage medium embodying instructions executable by the set top box to perform the method above, as taught by Zigmond, in order to allow the receiver to take on an easy form factor thereby allowing the receiver to easily be placed within a household (See col. 7 lines 37-49).

Claim 27 contains the limitations of claims 12 and 26 and is analyzed as previously discussed with respect to those claims.

Claim 28 contains the limitations of claims 13 and 26 and is analyzed as previously discussed with respect to those claims.

Claim 29 contains the limitations of claims 14 and 26 and is analyzed as previously discussed with respect to those claims.

Claim 30 contains the limitations of claims 15 and 26 and is analyzed as previously discussed with respect to those claims.

Claim 31 contains the limitations of claims 16 and 30 and is analyzed as previously discussed with respect to those claims.

Claim 33 contains the limitations of claims 18 and 26 and is analyzed as previously discussed with respect to those claims.

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Claim 34 contains the limitations of claims 9 and 26 and is analyzed as previously discussed with respect to those claims.

Claims 7, 19, and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reynolds et al. (US20010037500A1) in view of Gordon et al. (US20010014975A1) and Zigmond et al. (US006698020B1) as applied to claims 1 and 11 above, and further in view of Blackketter et al. (US20020056129A1).

Regarding claim 7, Reynolds in view of Gordon and Zigmond does not disclose that the signal configured to change the first priority is programmed by a time mark.

Blackketter et al. (Blackketter) discloses a similar insertion/triggering system. Blackketter discloses that a signal (e.g. trigger) that is configured to change items is programmed by a time mark (e.g. time attribute) (See Figs. 4-6; time attribute 403, 503, and 603; paragraphs 0014-0015). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system disclosed by Reynolds in view of Gordon and Zigmond to have the signal configured to change the first priority indicator be programmed by a time mark (e.g. time attribute), as taught by Blackketter, in order to provide a better system for synchronizing various items with programming (See paragraphs 0014-0015).

Claim 19 contains the limitations of claims 7 and 11 and is analyzed as previously discussed with respect to those claims. Furthermore, the time mark (e.g. time attribute) is used for synchronizing the separate media insertion with the broadcast stream (See Blackketter paragraphs 0014-0015).

Claim 37 contains the limitations of claims 1 and 7 and is analyzed as previously discussed with respect to those claims.

Claims 8, 17, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reynolds et al. (US20010037500A1) in view of Gordon et al. (US20010014975A1) and Zigmond et al. (US006698020B1) as applied to claims 1, 11, and 26 above, and further in view of Bullock et al. (US 5,070,404).

Regarding claim 8, Reynolds in view of Gordon and Zigmond does not disclose that the priority indicators are associated with the broadcast stream using at least one of a pilot tone and a watermark.

Bullock discloses the use of cue code wherein each cue code comprises four DTMF tones as indicator (Col. 6, lines 43-Col. 7, lines 25). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Reynolds in view of Gordon and Zigmond with Bullock so to take the advantage of the uniqueness of each cue code for determining the presence of the stored data having an identifier corresponding to the cue signal and for providing an indication to the user of the presence of the stored data (Col. 2, lines 1-6).

Claim 17 contains the limitations of claims 8 and 11 and is analyzed as previously discussed with respect to those claims. Furthermore, Reynolds in view of Gordon and Zigmond discloses a plurality of priority indicators are each associated with a different portion of the broadcast stream (See Reynolds paragraphs 0028 and 0038).

Claim 32 contains the limitations of claims 8 and 26 and is analyzed as previously discussed with respect to those claims. Furthermore, Reynolds in view of Gordon and Zigmond discloses a plurality of priority indicators are each associated with a different portion of the broadcast stream (See Reynolds paragraphs 0028 and 0038).

Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reynolds et al. (US20010037500A1) in view of Gordon et al. (US20010014975A1) and Zigmond et al. (US006698020B1) as applied to claim 1 above, and further in view of Robinett et al. (US006351474B1).

Regarding claim 38, Reynolds in view of Gordon and Zigmond discloses determining that the first priority indicator is greater than the second priority indicator (See Reynolds paragraph 0037; the second priority indicator can also be lower than the first priority indicator). However, Reynolds in view of Gordon and Zigmond does not disclose that the determining is done prior to receiving the signal and delaying the insertion of the separate media into the broadcast stream until the first priority indicator is modified.

Robinett et al. (Robinett) discloses a television distribution system. Robinett discloses that the system is able to determine a change in PID mappings prior to receiving a new PMT or CAT. This reads on "determining prior to receiving the signal". Furthermore, Robinett discloses delaying the insertion of the changed PID mapping until the new/modified version of the PMT or CAT is available. This reads on "delaying the insertion of the separate media into the broadcast stream until the first priority indicator

is modified" (See col. 32 line 56 – col. 33 line 7). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system disclosed by Reynolds in view of Gordon and Zigmond to have the determining step done prior to receiving the signal and delaying the insertion of the separate media into the broadcast stream until the first priority indicator is modified, as taught by Robinett, in order to ensure that all the changes are made and properly recorded (See col. 32 line 56 – col. 33 line 7).

#### (10) Response to Argument

Appellant argues with respect to claim1 that Gordon is directed towards local servers and not set-top boxes and that the mere fact of that combination might result in a predictable result amounts to a mere conclusory statement and does not satisfy the obvious inquiry (See Brief pages 4-5). However, the examiner respectfully disagrees. Gordon does disclose a process/method (e.g. changing priorities in response to a received signal) that is well known in the art and are used to perform functions that are also well known in the art (e.g. changing priorities). The devices disclosed by Reynolds, Gordon, and Zigmond are in a sense receivers because of their ability to receive signals from other sources (See Reynolds Fig. 1, Gordon Fig. 3, and Zigmond Fig. 3). Zigmond also discloses that the receivers are also set-top boxes (See Zigmond Fig. 3; col. 7 lines 42-49, WebTV box). Furthermore, the devices contain similar components in order to execute program instructions. Therefore, one of ordinary skill would recognize that such a process/method could be placed in various embodiments (e.g. in a local server or in a set-top box) and still would produce a predictable result (e.g. producing changing

priorities in response to a received signal) for the incentive of allowing the system to dynamically adjust how to distribute programs based on viewing trends and events (See Gordon paragraph 0007 and 0029). Therefore, the examiner has shown prior art that discloses a known process done in one device can be easily implemented in another device in the same field to yield a predicable result that would provide a similar incentive as discussed above and in the rejection, thus meeting the obvious inquiry.

Appellant makes similar arguments with respect to claims 2-19, 26-34, and 37 (See Brief pages 5-7). The examiner has addressed these arguments above.

Appellant also argues with respect to claim 38 that Robinett does not disclose determining that the first priority indicator is greater than the second priority indicator prior to receiving the signal; and delaying the insertion of the separate media into the broadcast stream until the first priority indicator is modified (See Brief page 7). However, reading the claims in the broadest sense, Reynolds in view of Gordon, Zigmond, and Robinett does disclose those limitations in the claims. Reynolds discloses determining that the first priority indicator is greater than the second priority indicator (See Reynolds paragraph 0037; the second priority indicator can also be lower than the first priority indicator). Furthermore, Robinett discloses that the system is able to determine a change in PID mappings prior to receiving a new version of PMT or CAT. This reads on "determining prior to receiving the signal". Robinett also discloses delaying the insertion of the changed PID mapping until the new/modified version of the PMT or CAT is available. This reads on "delaying the insertion of the separate media into the broadcast stream until the first priority indicator is modified" (See col. 32 line 56 – col. 33 line 7).

Appellant argues that the PID mapping are not inserted a broadcast stream. The examiner respectfully disagrees. PID mappings are inserted (or placed) into transport stream so that the receivers may use the PID mappings to locate certain packets (See Robinett col. 32 line 56 – col. 33 line 7). It is also noted that Reynolds discloses separate media that is inserted (or used to replace items) in a broadcast stream as discussed in the rejection. Appellant also argues that Robinett's outputting does not constitute modifying. The examiner respectfully disagrees. Robinett discloses outputting a new version of the PMT or CAT when it's available. The insertion of the changed PID mappings are not done until the new version (or modified) of the PMT or CAT are outputted. Therefore, the insertion is not only based on the output, but also on the basis of the new version (or modified) of the PMT or CAT (See Robinett col. 32 line 56 – col. 33 line 7). It is also noted that Reynolds discloses priority indicators as discussed in the rejection.

#### (11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Joseph Ustaris

/Joseph G Ustaris/

Primary Examiner, Art Unit 2424

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